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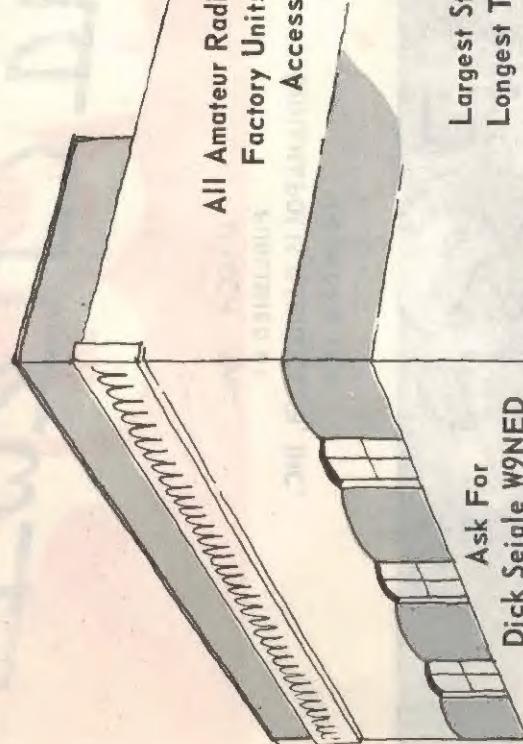
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The Indianapolis Radio Club meets on the second and fourth Fridays of each month except July and August in the Indianapolis Park Board Building at 29th and Harding Streets. Meetings start promptly at 8:00 P.M., EST.

AMA-CHEWER STAFF

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Ama-Chewer is published monthly by and for the I.R.C. and all amateurs in the Indianapolis area. Non-members may subscribe for \$1.00 a year.

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Ham Ads (5 line limit) are free to members and subscribers. Others may submit ads for 50 cents each.

AMA-Chewer welcomes the forwarding of information on coming events and activities of other clubs for publication.

GLENDALE
GLENDALE SHOPPING CENTER
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At last the miserable weather of January has gone, with its zero temperatures, and February has arrived with a little better outlook on weather conditions. Maybe it won't be perfect, but we hope it will be better than January was.

However, the bad weather didn't dampen the spirits of the IRC members who turned out in force for the two meetings in January. From telephone calls and eyeball QSOs it is a wonderful feeling to know how the members felt about the first two meetings of the year. If you weren't there, you don't know what you missed, especially Frank Owens' talk and diagrams on FM circuits. Don't fret if you missed, because Frank promised to be back with more interesting talks as we need him.

The February 12 speaker was Jerry Zimmerman, the weather man for WFBM, who insists he just reports the weather, he doesn't control it.

Referring back to the bad weather in January, it gave me some time to get together some very interesting programs for future meetings, since most of the people I needed to talk with were in their offices due to the bad weather.

I wish to take this opportunity to thank all the members, old and new, who are attending the meetings; especially those who are returning to the old club room--whose familiar faces have been missed for quite some time. Keep up the good attendance. I believe you will enjoy what you will see and hear at future meetings.

Just remember you are all welcome, whether you are a member or a visitor. However, any person who chooses to become a member after a few visits to the meetings will be most welcome.

Your prez
K9JSF

* * *

Jerry Todd, W9ATS, former president of IRC now living in Greenville, Ill., gets on 75 SSB occasionally to visit with his old cronies hereabouts. Check with Johnny Jones for the sked.

It's ham directory time again, boys and girls! So yuh'all come a-runnin' when you're asked to help out with part of the work. The production of a complete directory of Indianapolis hams is a club project of which we all can be proud. It's been done three times, at two-year intervals, each time resulting in a bigger and better product.

Inquiry cards have gone out to all area hams listed in the Spring, 1965, Call Book, and are due back by the time this issue of Ama-Chewer goes to press. If you know of anyone who did not receive a card, please notify Alvey Pittman, W9JJC, or Pat Husk, K9EUQ, immediately. The cover of this issue shows Alvey passing out cards for addressing by willing workers Ed Ward, K9CRS, and Al Minnick, K9SUW.

The next step will be making assignments for a telephone follow-up committee to contact every person who failed to return a card or who could not be reached because of an incorrect address or mailing foul-up. If you are asked to help with this task, please pitch in and do a thorough job, since the accuracy of the directory will depend on the quality of your work.

Later, after the pages are printed, another crew will be assembled to help put the whole works together. This again will involve the careful following of directions. In neither case will much time be required. And it's all for a good cause--the IRC.

* * *

SILENT KEY

His many friends on the CW traffic nets were shocked and saddened to hear of the death of Harry Smith, W9TT, a real old timer and a hard-working radio operator. Harry died February 6 in Community Hospital of heart trouble. A devoted CW man, he was Route Manager of the Indiana State Traffic Net (QIN) and the River Forecast Net (RFN), and was active in the last trunk line net to bow before the oncoming of the National Traffic System. He was first licensed as an amateur in 1919 as 8TS in Detroit. He later became 9APK, while at Northwestern University studying engineering.

usual present day method of using a reactance tube to obtain phase modulation.

He stressed that it's necessary to overdrive the stages in an FM transmitter to minimize AM output. Frank passed out sheets showing typical FM stages, then explained the operation of the Foster Seely discriminator, the Travis discriminator, limiters, ratio detectors, noise amplifiers and squelch circuits. Sorry if you missed it, and personally I am looking forward to another program from Frank soon.

* * *

PROGRAM PREVIEW

By Bert Brouse, K9JSF

February 26--Through the courtesy of Capt. Rainey and Gordon Nutty of the Indiana State Police, we will have a program on the department's microwave communication system.

March 12--By popular demand of the club members, we are pleased to announce Max Galloway, K90XA, will present a program on antenna construction and tuning. Have your questions ready.

PROGRAM REVIEW

By Jerry Lucas, W9APJ

January 8

The program was installation of officers with Alvey, W9JJC, our perennial MC, doing his usual capable job. Alvey's task was made easier this year because he only had to think up nice things to say about two new officers. All he had to do for the rest of us was remember what he said last year and repeat.

January 22

Bert led us to believe the program was a last-minute off-the-cuff job, but if this is true, you will find me on the front row the next time Frank Owens, K9MVG, presents a prepared program. For this "extemporaneous" program, Frank brought along a 6-meter FM transceiver he designed and built. The above photo shows Frank explaining the unit to part of the gang after the meeting.

He began by explaining the production of FM, from the use of a condensor mike across the tank of an oscillator to the

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March 26--The meeting will NOT be at the Park Board building. We will meet at the Indianapolis Power and Light Co. Plant, 1234 W. Morris St., just off Kentucky Avenue, for a tour through the Plant. We wish to thank Ray Forbes, W9HNS, a very faithful club member, for arranging this trip. Try to be there by about 7:30 so the tour can start promptly at 8.

May 14--Home brew night; May 28--auction night.

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LOOK--UP IN THE SKY!

Launch time for Oscar III, the amateur radio repeater satellite, is getting near, reports Don Miller, W9NTP. He says orbit times will be given on WBRI, 1500 kc., at 4:30 p.m. daily beginning as soon as possible after the launch date. Orbit information also will be transmitted on 147.3 mc. FM. If you can't get either, call Gil Curtis, WA9GEU, CL 5-6693. The Indianapolis area TV experiment planned for use with Oscar III was described in February, 1965, QST, page 20.

NOW WHERE'S THAT EMERGENCY?

The portable gasoline-powered generator which has been discussed at so many meetings is now in the club's possession. It's a Zeus model ASP-1500, which weighs 90 pounds and provides 1500 watts of single-phase 115 volt juice, rated at 80% of full power.

It was obtained for \$200 for use as a power source so the club may do its part in fulfilling amateurs' obligation to provide emergency communications as a public service. In such a situation, station equipment owned by club members can be put on the air at any location without the need for commercial power lines.

Naturally, it also will be available for Field Day and for other club projects. It may be necessary to rent or borrow an additional generator for Field Day, depending on the amount of equipment to be used. It was generally felt, in discussions of the purchase, that a generator large enough to operate the usual number of stations on IRC field day would cost too much and be too hard to move to be worthwhile. However, this 1500-watt model should easily handle at least two stations of moderate power for emergency use. (But no, it will not operate the club coffee maker, unless you want to transmit with transistors.)

The generator will be in the custody of the Chief Operator. Arrangements for its use in emergency situations should be made through the club President or Board of Directors.

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BRINGING HOME THE BACON

Bill Bradburn, K9KCQ, got a pleasant Christmas surprise when he won a Drake TR-3, with AC power supply, in a drawing sponsored by the Dayton Amateur Radio Assn. on Dec. 19.

* * * * *

Dave Morthland, WA9JGG, is the Indianapolis area correspondent for The Harbor Beam, paper of the Michigan City Amateur Radio Club.

Ten meters is dead--everyone knows that. There's no point in getting on the band because no one else is on it; you can't talk more than a block or two; the band is useless, so let's all go down on 75 and complain about it.

But suddenly the dead band came to life--and there actually were stations interfering with one another!

It happened the evening of January 25, when a number of stations over the state all piled on 28.6 mc (approx) to see just how far they could communicate reliably on the "dead" band. It was like the excitement of getting into a contest for the first time and finding you can actually contact other stations. Most everybody was on SSB, although at least one AM and one CW signal were heard. Just about everyone seemed able to work or hear stations 50 miles or so away, and a few reported contacts of 100 miles or more. It was all an experiment, but possibly could lead to more regular operating on 10 meters. The Ama-Chewer will be glad to hear from others planning activity on the band.

* * * * *

Ray Forbes, W9HNS, was working a new contact on 40 meter CW recently and found the OM was a retired railroad Morse operator. When the fellow learned Ray also was retired, he said he would send Ray membership in the "Old Loafers Net," composed of retired hams.

* * * * *

GRAHAMS SPECIALS OF THE MONTH

Hallicrafter SX 117...REAL CLEAN.....	\$330.00
Hallicrafter SX-122.....LIKE NEW.....	\$245.00
National NCX-3 Transceiver	\$315.00
National NC-115 Receiver	\$142.00
National HRO 50T	\$149.00
Hammarlund HQ 140X.....	\$147.00
Hammarlund HX 50 Transmitter	\$300.00
S.B.E. 33 Transceiver	\$289.50
Drake 2B Receiver with/calibrator-speaker & extra crystals	\$230.00
Johnson Viking Valiant Xmtr.	\$199.00

Some ops misunderstood the notice in QST recently and thought that ARRL dues had been increased. They have not. Only the QST single copy price in stores and to non-member subscribers has been increased. This was clearly stated, but some folks just don't read carefully, apparently. To emphasize the correct information, here is an item printed originally in February, 1965, QST:

"On page 49 of December QST, we announced a change in the rate which libraries, schools, laboratories and the like will have to pay for QST annually, and also in the retail price at radio stores. Some individual members have misunderstood and have sent in more money than needed.

"We remind members therefore that the fee for the regular combination membership in ARRL and subscription to QST, for Full and Associate Members in the U. S., continues to be \$5.00; in Canada, it stays at \$5.25, and elsewhere the fee remains \$6.00. Members should pay their dues either through an affiliated radio club or direct; memberships are no longer accepted through agencies."

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"Well, old man, your signal is fading a little, so I guess we better sign while we can still call it a 100% QSO."

How often have you heard that expression on the ham bands? Plenty of times, no doubt, for it's been said often. It leads one to wonder if the spark of challenge is dying in ham radio. Why, after all, does it matter whether a QSO is 100% or not? Should an operator be ashamed to admit he missed a few words the other guy said--especially on phone? If the other guy's a bore and you want to get rid of him, that's another matter. But the operator who gives up just because the station he's talking to no longer wraps the S meter needle around the pin isn't really a radio operator at all. He belongs on 27 mc., or on a rural party line telephone circuit.

The manufacturers should be insulted with the behavior of these "solid copy or nothing" characters, after all the high powered advertising they throw at us about their fancy Q multipliers, notch filters, narrow band passes, etc. The ham who buys a chrome-plated, slab-mounted, signal squeezer receiver from the friendly radio emporium is paying out a large chunk of dough mainly for two basic items--selectivity and stability. The stability usually goes without being appreciated, and the selectivity without being used, judging by many on-the-air comments.

Getting on the air is so easy anymore (just memorize the license manual for a ticket and pay easy monthly installments for a station) that many don't appreciate what we have in this privilege of communicating by radio. Even as easy as it is for us, look at all the people in the country--and the world--who don't have this privilege. So what's say we dedicate our activities to making the most of it. If we're ever called on to put our operating "skills" to work under unpleasant conditions, the ability to copy those weak ones will be one of the operations we'll have to do.

Scientists tell us that we're taller in the morning than we are in the evening. Most of us have noticed, too, that we're shorter around the end of the month.

The three leading American parties are Republican, Democratic, and cocktail.

Dean Coffin, WA9CKZ, joined the married ranks on Dec. 12. His new XYL's handle is JO Ann, and the new QTH is 1802 Westview.

volunteer leaders of the League in the Northeast took part in the observance there, along with representatives of the local, state and federal governments, the Federal Communications Commission, the military, relief agencies and philatelists.

"On behalf of the American Radio Relay League, I want to welcome all of you to these brief ceremonies, and to thank you for helping us to mark the first issuance of a postage stamp honoring amateur radio.

"The issuance of a commemorative stamp is a great honor, an unimpeachable status symbol, and a highly sought privilege--and I am sure the stamp advisory committee and the philatelic division have the bruises to prove the point!

"I understood from the press reports that the futuristic stamp issue honoring the Fine Arts, also recently released, has created quite a furor. I doubt the ham stamp will raise any such storm; although not being an artist, I think the design of just of our own a little 'far out.' But that is a sign of the times, I guess.

"Seriously, though, of hundreds of requests received each year, the Postmaster can grant only fifteen. Why were amateurs among the lucky ones this year? The Post Office's announcement last June dwelt on our many contributions to the public welfare. They mentioned especially the services of amateurs in civil defense and disaster communications, and the earthquake in Alaska this last March.

"It seems as though there is never a year when at least one portion of our vast country does not encounter a major disaster which destroys or seriously overloads the usual channels of communications. Yet the statistical odds are--with 250,000 amateurs in a population of 180 million--that in every community of 750 souls or more there will be a radio amateur with his own equipment--either in his home, in his car, or at some emergency headquarters. It is he who must ask for medical help, food, blankets, or other assistance. It is he who supplies the routes by which relief can reach those in need. It is the ham who transmits the welcome news 'We are all okay' to relatives on the outside. And so it was in Alaska last March.

"Fittinly, the first day office for this stamp is that at Anchorage, where yesterday ceremonies were held marking the first day of sale. Our General Counsel Robert Booth and the

"Another point mentioned by the Post Office is the fiftieth anniversary of our American Radio Relay League. Had the amateurs back in 1914 not founded our traditions of public service, it is doubtful that hams would even be around today much less with the equipment and know-how to do the job. Hiram Percy Maxim built well on that first little group who were assembled in Hartford 50 years ago.

"On the technical front, many scientific break-throughs have been developed by amateurs before being adopted in the world of commercial radio. In the early 20's the late John Reinartz and his friends opened up the entire field of high frequency communications, and he--as a devoted amateur--may quite properly be regarded as the real father of short-wave radio.

"The first broadcast stations were neighborhood affairs conducted by amateurs. In fact, hams, even to this day, still provide much of the technical manpower in broadcasting, TV and most of the other radio services, including aeronautical, maritime, police and many additional public services.

"Recently the Air Force saved a great deal of money, and of even more importance, a great deal of time in its development of global command radio equipment by starting with amateur single-sideband gear. It was tested on flights all over the world with ham stations on the ground. The final equipment adopted by the Air Force was a direct refinement of the amateur equipment used in the tests.

"That the pioneering spirit of ham radio is far from dead is shown by our successful satellites 'Oscar I' and 'Oscar II,' which preceded Telstar and were the first truly peaceful uses of space communication. They are soon to be joined by 'Oscar III,' a more intricate version, which will even talk back when spoken to. Then, too, amateurs have recently talked to each other across the Atlantic by bouncing their VHF and UHF signals off the moon!

"There is no question that the United States leads all other

nations in electronics--and it is not a mere coincidence that during the last 50 years more than a million individuals have gone through the ranks of amateur radio. As youngsters, their scientific curiosities were first aroused, and their imaginations fired up to go on into careers in science and engineering. Today this body of men, who got their start as amateurs, form the backbone of our electronic, missile and communication activities. They constitute a truly great national asset, and they play a vital part in our National Security. In fact, I often think of amateur radio as one of our most sophisticated secret weapons--for while it is out in the open for all to see, it's real role has rarely been recognized.

"For half a century our government has taken a far-seeing attitude of encouraging and fostering the growth of amateur radio, and as a result our country has benefitted by having an ample and self-replenishing supply of managers, engineers and technicians in the vital fields they occupy. The policy has paid off more handsomely than could possibly have been imagined when it all started 50 years ago; and it is heartening to believe, if we can overcome the problems of a crowded spectrum, that the youngsters of the next generation may have the same opportunity that was ours to carry on this great American heritage.

"Today, you have come to help us celebrate the distinct honor and recognition that has come to amateur radio by the issuance of this commemorative stamp.

"On behalf of amateurs everywhere--old timers and newcomers alike--may I say 'thank you.'"

* * *

SPLATTER

Ward Studor, WA9CCX, strictly a CW man since his Novice days, has taken on a new challenge--the building of a Heathkit SB-400 single sideband transmitter.

Susannah Fitch, daughter of Frank Fitch, W9LJW, received a straight 6 grade average last semester at Purdue University. For those who don't know the Purdue grading system, that means a perfect score--you just can't do any better---and she did it in such subjects as calculus and chemistry!

AMATEUR RADIO OPERATIONS IN THE ANTARCTIC

Contacts with the Antarctic on the amateur bands are reportedly best between 0800 GMT and 1000 GMT using twenty meters. K1NAP, US Navy Constr. Battalion Center, Davisville, R. I., has a close interest in working the stations there. We're indebted to Lt. Comdr. R. E. Mickley, USN, Chief NAVY MARS, for the current list of Amateur Radio call signs activated this year in the Antarctic:

KC4USZ	Beardmore
KC4USB	Byrd
KC4USK	Eights Station
KC4USH	Cape Hallet
KC4USL	Little Rockford
KC4USV	McMurdo Sound
KC4USP	Palmer
KC4USN	South Pole
KC4USD	USNS CHATTAHOOCHEE (T-AOG 82)
KC4USE	USCG EASTWIND (WAGB-279)
KC4USA	USS EDISTO (AGB 2)
KC4USG	USS GLACIER (AGB 4)
KC4USS	USS MILLS (DER 383)
KC4USF	USNS PVT JOSEPH F. MERRELL (T-AK 275)
KC4USI	USS STATEN ISLAND (AGB 5)
KC4UST	USNS PVT JOHN R. TOWLE (T-AK 240)
KC4USW	USNS WYANDOT (T-AKA 92)
KC4USX	AIRDEVRON 6 (VX6)

WA2AJ (Geo. Scavron) Union, N. J., has likewise furnished (from contact with VP8HK) the following data on amateur calls used at the bases of the British Antarctic Survey group (Port Stanley, Falkland Is.) QSLs via RSGB.

<u>base</u>	<u>Location</u>
Whalley Bay	Grahamland
Stonington Id.	"
"	So. Shetlands
Deception Id.	Grahamland
Adelaide Id.	"
Stonington Id.	Stonington Id.

VP8FC/MM Royal Ship John Bisco
VP8IH/MM HMS Protector at New So. Georgia
Other bases: 'Argentina' Ids., Grahamland, 'Hotel' Signy Island, South Orkney Islands.

--from ARRL Communications Dept. bulletin

Why is it phone stations persist in using Q signals and abbreviations which were designed solely to speed the transmission of code? (You know, those dits and dahs.) Is it to impress others with their "knowledge" of the fine points of code work, when actually some probably couldn't pass the novice code test? Certainly it is not to speed up the conversation. After all, "My home QTH" contains five syllables, while "address" has only two syllables.

I am waiting patiently to hear a phone station say "Wx hr is cldy es wmm, OM, pst QSL es hpe to caugn." I betcha in the not too distant future I'll hear it. Ugh, makes me want to spit on the cat!

T. O. M. Jg

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HEAD SCRATCHER OF THE MONTH

The answer to last month's puzzle was easy to get, even without pencil and paper. If you could visualize the circuit in a different form, you would see it was a balanced Wheatstone bridge, so the voltage across the 2-ohm resistor was zero.

Now, for a real quickie. Grab a pencil and jot down, real fast now, the figures for eleven thousand, eleven hundred and eleven. Don't peek, but the answer is on the next page.

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EARLY SPRING GO SALE!!

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5 PIECES OF GONSET

5 PIECES OF LAFAYETTE

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4131 North Keystone Ave.

The Department of Transport has changed the rules of Canadian amateurs to permit only CW in the lower 100 kc. of the six and two meter bands. The changes, effective immediately, are intended to protect stations involved in weak signal work, such as moonbounce, auroral reflection, and the like, and particularly in connection with the Oscar III repeater which is scheduled to operate in the two meter band after launch sometime this year.

Official Bulletin Nr 990 Jan 28 1965
The U. S. Supreme Court has refused to review the Federal Court of Appeals decision that the present FCC license application fees are legal. ARRL was one of several groups who had asked for the review. The only remaining means of overturning FCC fees is through Congressional action. Texas Representative Rogers will seek passage of a bill forbidding FCC to charge fees without the express authority of the Congress. Hearings were held on a similar bill last year, but the bill did not reach the floor. See September 1964 QST and the forthcoming March 1965 issue for complete details.

Official Bulletin Nr 991 Feb 4 1965
FCC has adopted the Conditional Class rules it proposed in Docket 15640, shown in full on page 56 of November QST. After April 15, applicants for Conditional Class under the distance rules must live more than 175 miles from an FCC office, quarterly or semiannual examination point. There is no change in eligibility by reason of physical disability, military service, or overseas residence. Present holders of the Conditional Class license are not affected in any way. Full details will be shown in the April issue of QST.

1111 : 1222
PRAIRIE 312222

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Jerry Lucas, W9APJ, lays claim to the unofficial record for the longest-lasting loose electrical joint. Jerry was making resistance measurements recently with a multimeter he built about 25 years ago. It has always performed perfectly, but this time it seemed erratic on the ohms scale. Upon taking it apart, he discovered a joint he had never soldered!

**JOS. G.
CHARPIE**
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